

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number D030065
Material name RICHELIEU SILICONE
Revision date 02-18-2014
Company information QUINCAILLERIE RICHELIEU L TEE
MONTREAL QC H4S 1V4 CANADA,
Company phone
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 03
Supersedes date 02-14-2014
Expiry Date 14-Feb-2017
Product use Release Agent

2. Hazards Identification

Emergency overview Flammable aerosol. CONTENTS UNDER PRESSURE.
Pressurized container may explode when exposed to heat or flame. Will be easily ignited by heat, spark or flames. May be fatal if inhaled. Very toxic. Mutagen.

Potential health effects

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Eyes Contact with eyes may cause irritation.

Skin May cause skin irritation.

Inhalation Intentional misuse by concentrating and inhaling the product can be harmful or fatal. May cause irritation of respiratory tract. Prolonged inhalation may be harmful.

Ingestion Exposure by ingestion of an aerosol is unlikely. Components of the product may be absorbed into the body by ingestion. Irritating. May cause nausea, stomach pain and vomiting.

Target organs Central nervous system. Lungs. Respiratory system.

Chronic effects Pregnant women or women of child-bearing age should not be exposed to this product. May cause birth defects. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Signs and symptoms Symptoms are prostration, gasping, pallor, and uncoordinated movements. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Potential environmental effects Components of this product are hazardous to aquatic life. May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Acetone	67-64-1	15 - 40
Propane	74-98-6	15 - 40
Butane	106-97-8	10 - 30
Distillates (petroleum), Light Distillate Hydrotreating Process, Low-boiling	68410-97-9	10 - 30
Cyclohexane	110-82-7	5 - 10
N-hexane	110-54-3	0.1 - 1
Other components below reportable levels		7 - 13

Product name: 12 OZ SW IND. SILICONE SPRAY LB 12PK

Product #: 1000000562 Version #: 03 Revision date: 02-18-2014 Issue date: 02-14-2014

MSDS CANADA

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4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Continue rinsing. Call a physician or poison control center immediately.
Skin contact	Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Call a physician or poison control center immediately. For minor skin contact, avoid spreading material on unaffected skin. Wash clothing separately before reuse.
Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.
Ingestion	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes to physician

Symptoms may be delayed.

General advice

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties

Flammable by WHMIS criteria. Heat may cause the containers to explode. Ruptured cylinders may rocket.

Extinguishing media

Suitable extinguishing media Powder. Alcohol resistant foam. Water. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

Specific hazards arising from the chemical Contents under pressure. Pressurized container may explode when exposed to heat or flame. Fire may produce irritating, corrosive and/or toxic gases.

Protective equipment for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Do not direct water at source of leak or safety devices as icing may occur. Use water spray to cool unopened containers. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.

Specific methods

Cool containers exposed to flames with water until well after the fire is out.

Explosion data

Sensitivity to static discharge Not available.

Sensitivity to mechanical impact Not available.

6. Accidental Release Measures

Personal precautions

Consider initial downwind evacuation for at least 500 meters (1/3 mile). Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the MSDS.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Move the cylinder to a safe and open area if the leak is irreparable. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Keep out of low areas. Prevent entry into waterways, sewer, basements or confined areas.
Methods for cleaning up	Ventilate the area. Should not be released into the environment. Stop the flow of material, if this is without risk. Isolate area until gas has dispersed. Following product recovery, flush area with water. Clean up in accordance with all applicable regulations. For waste disposal, see section 13 of the MSDS.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure. Do not get this material on clothing. Do not use in areas without adequate ventilation. Wash thoroughly after handling.
Storage	Keep locked up. Contents under pressure. The pressure in sealed containers can increase under the influence of heat. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the MSDS). Level 3 Aerosol.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH Biological Exposure Indices Components

Components	Type	Value
Acetone (CAS 67-64-1)	BEI	50 mg/l
n-Hexane (CAS 110-54-3)	BEI	0.4 mg/l

US. ACGIH Threshold Limit Values Components

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
n-Hexane (CAS 110-54-3)	TWA	50 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	1800 mg/m ³
		750 ppm
	TWA	1200 mg/m ³
Butane (CAS 106-97-8)		500 ppm
	TWA	1000 ppm
Cyclohexane (CAS 110-82-7)		344 mg/m ³
		100 ppm
n-Hexane (CAS 110-54-3)		176 mg/m ³
	TWA	50 ppm
Propane (CAS 74-98-6)	TWA	1000 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm
Butane (CAS 106-97-8)	STEL	750 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
	TWA	600 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
n-Hexane (CAS 110-54-3)	TWA	20 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm
Butane (CAS 106-97-8)	TWA	800 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
n-Hexane (CAS 110-54-3)	TWA	50 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Acetone (CAS 67-64-1)	STEL	2380 mg/m3
	TWA	1000 ppm
		1190 mg/m3
		500 ppm
Butane (CAS 106-97-8)	TWA	1900 mg/m3
		800 ppm
Cyclohexane (CAS 110-82-7)	TWA	1030 mg/m3
		300 ppm
n-Hexane (CAS 110-54-3)	TWA	176 mg/m3
		50 ppm
Propane (CAS 74-98-6)	TWA	1800 mg/m3
		1000 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Acetone (CAS 67-64-1)	PEL	2400 mg/m3
		1000 ppm
Cyclohexane (CAS 110-82-7)	PEL	1050 mg/m3
		300 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3
		500 ppm
Propane (CAS 74-98-6)	PEL	1800 mg/m3
		1000 ppm

Exposure guidelines

Canada - Alberta OELs: Skin designation

N-hexane (CAS 110-54-3) Can be absorbed through the skin.

Canada - British Columbia OELs: Skin designation

N-hexane (CAS 110-54-3) Can be absorbed through the skin.

Canada - Manitoba OELs: Skin designation

N-hexane (CAS 110-54-3) Can be absorbed through the skin.

Canada - Ontario OELs: Skin designation

N-hexane (CAS 110-54-3) Can be absorbed through the skin.

Canada - Quebec OELs: Skin designation

N-hexane (CAS 110-54-3) Can be absorbed through the skin.

Canada - Saskatchewan OELs: Skin designation

N-hexane (CAS 110-54-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

N-hexane (CAS 110-54-3) Can be absorbed through the skin.

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye / face protection	Wear safety glasses with side shields (or goggles).
Skin protection	Wear chemical protective equipment that is specifically recommended by the manufacturer.
Respiratory protection	If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance	Not available.
Boiling point	93.19 °F (33.99 °C) estimated
Color	Not available.
Flash point	-156.00 °F (-104.44 °C) Propellant estimated
Form	Aerosol.
Melting point/Freezing point	Not available.
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Physical state	Gas.
Vapor pressure	50 - 70 psig @70F estimated
Solubility (water)	Not available.
Specific gravity	0.772 estimated
Flammability limits in air, upper, % by volume	8.1 % estimated
Flammability limits in air, lower, % by volume	1.9 % estimated
Other data	
Heat of combustion	37.34 kJ/g estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Risk of ignition.
Conditions to avoid	Aerosol containers are unstable at temperatures above 49°C. Avoid temperatures exceeding the flash point.
Hazardous decomposition products	Not available.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Acetone (CAS 67-64-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	20000 mg/kg 20 ml/kg
<i>Inhalation</i>		
LC50	Rat	76 mg/l, 4 Hours 50.1 mg/l, 8 Hours
<i>Oral</i>		
LD50	Mouse	3000 mg/kg
	Rabbit	5340 mg/kg
	Rat	5800 mg/kg

Components	Species	Test Results
<i>Other</i>		
LD50	Mouse	1297 mg/kg
	Rat	5500 mg/kg
Butane (CAS 106-97-8)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
Cyclohexane (CAS 110-82-7)		
Acute		
<i>Inhalation</i>		
NOEL	Monkey	1243 mg/l, 6 Hours
<i>Oral</i>		
LD50	Mouse	1300 mg/kg
	Rat	29820 mg/kg
N-hexane (CAS 110-54-3)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	48000 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	24 mg/kg
	Wistar rat	49 mg/kg
Propane (CAS 74-98-6)		
Acute		
<i>Inhalation</i>		
LC50	Rat	> 1442.847 mg/l, 15 Minutes
		658 mg/l/4h

* Estimates for product may be based on additional component data not shown.

Local effects	Very toxic by inhalation.
Chronic effects	Prolonged inhalation may be harmful.
Carcinogenicity	
ACGIH Carcinogens	
Acetone (CAS 67-64-1)	A4 Not classifiable as a human carcinogen.
Reproductive effects	Mutagenic effects. May cause reproductive system disorder and/or damage.
Further information	Symptoms may be delayed.

12. Ecological Information

Ecotoxicological data			
Product	Species	Species	Test Results
12 OZ SW IND. SILICONE SPRAY LB 12PK (CAS Mixture)			
Algae	IC50	Algae	31326.666 mg/L, 72 Hours, estimated
Crustacea	EC50	Daphnia	17192.666 mg/l, 48 hours, estimated
Fish	LC50	Fish	42.5179 mg/l, 96 hours, estimated
Components	Species	Species	Test Results
Acetone (CAS 67-64-1)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	21.6 - 23.9 mg/l, 48 hours

Components	Species	Test Results
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) 4740 - 6330 mg/l, 96 hours
Cyclohexane (CAS 110-82-7)		
Aquatic		
Fish	LC50	Fathead minnow (Pimephales promelas) 23.03 - 42.07 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Ecotoxicity	Components of this product are hazardous to aquatic life.
Environmental effects	Harmful to aquatic organisms. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	Not available.
Partition coefficient	
Acetone	-0.24
Butane	2.89
Cyclohexane	3.44
N-hexane	3.9
Propane	2.36

13. Disposal Considerations

Disposal instructions	Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

TDG

UN number	UN1950
UN proper shipping name	AEROSOLS, flammable, MARINE POLLUTANT
Hazard class	2.1
Marine pollutant	Yes
Special provisions	80
Packaging exceptions	If <1L: Limited Quantity

IATA

UN number	UN1950
UN proper shipping name	Aerosols, flammable
Transport hazard class(es)	2.1
Labels required	2.1
ERG code	10L
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.
Packaging Exceptions	LTD QTY

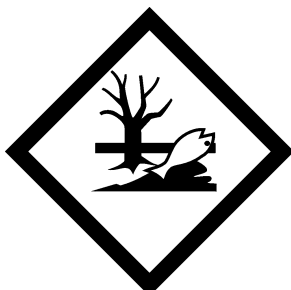
IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS, MARINE POLLUTANT
Transport hazard class(es)	2.1
Environmental hazards	
Marine pollutant	Yes
Labels required	None
EmS	F-D, S-U
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
Packaging Exceptions	LTD QTY

IATA; IMDG; TDG



Marine pollutant



15. Regulatory Information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status

Controlled

WHMIS classification

A - Compressed Gas
B5 - Flammable Aerosols
D2A - Other Toxic Effects-VERY TOXIC
D2B - Other Toxic Effects-TOXIC

WHMIS labeling



Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

This data sheet contains changes from the previous version in section(s):

Product and Company Identification: Product and Company Identification
Regulatory Information: Canada